AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A telecommunication signal frame comprising

a section overhead with a Regeneration Section OverHead (RSOH) and a Multiplex Section OverHead (MSOH), and

said RSOH comprising a first byte and a second byte, said first byte comprising bits identifying the destination node and said second byte comprising bits identifying the source node, and

wherein said MSOH comprises a third byte comprising at least one Source Node IDentification Extension bit, at least one Destination Node IDentification Extension bit and at least one bit indicating a change of the information in said at least one of said first, second and third byte.

2. (Previously Presented) A frame according to claim 1, wherein said Source Node IDentification Extension bits and said Destination Node IDentification Extension, each comprise two bits and four bits are allocated to indicate said information change.

3. (Previously Presented) A frame according to claim 1, wherein both said Source Node IDentification Extension bits and said Destination Node IDentification Extension bits are three bits and said bits indicating an information change are two bits.

4. (Previously Presented) A frame according to claim 2, wherein said Source Node IDentification Extension bits are fifth and sixth bits of the third byte, said Destination Node IDentification Extension bits are subsequent two bits and said bits indicating an information change are first four ones.

5. (Previously Presented) A frame according to claim 3, wherein said Source Node IDentification Extension bits are third, fourth and fifth bits of the third byte, said Destination Node IDentification Extension bits are subsequent three bits and said bits indicating an information change are first two bits.

6. (Previously Presented) A frame according to claim 1, wherein the third byte is located at 9^{th} row, 9^{th} column of first STM-1 of the frame.

7. (Previously Presented) A method for optimizing the time management of the information carried by a first byte and a second byte of a Multiplex Section OverHead (MSOH) of a Section Overhead (SOH) of a telecommunication signal frame and for increasing a number of nodes in a telecommunications optical ring, comprising:

arranging bits of a third byte of the MDOH in such a way that at least one of said bits represents an Extension of Source Node IDentification and at least one of said bits represents an Extension of Destination node IDentification and at least one of the remaining bits indicates an information change in said at least one of said first, second and third byte.

8. (Previously Presented) The method according to claim 7, wherein both said Source Node IDentification Extension bits and said Destination Node IDentification Extension bits are two in number and said bits indicating an information change are four in number.

9. (Previously Presented) The method according to claim 7, wherein both said Source Node IDentification Extension bits and said Destination Node IDentification Extension bits are three in number and said bits indicating an information change are two in number.

10. (Previously Presented) The method according to claim 7, wherein in transmitting the frame, the first and the second bytes are sent first and finally the third byte is sent.

11. (Previously Presented) The method according to claim 7, wherein in receiving the frame, the first and second bytes are read if at least one but preferably all bits indicating an information change of the third byte are changed and as a result an interrupt is generated.

12. (Previously Presented) The method according to claim 11, wherein the Destination Node IDentification is calculated with the following algorithm:

$$IDDN_{K1+K0} = IDDN_{K1} + 16 * IDDNE_{K0}$$

where: $IDDN_{K1+K0}$ = binary number "extended" IDentification of the Destination Node (calculated by using the bits of the first and third byte); $IDDN_{K1}$ = binary number IDentification of the Destination Node; $IDDNE_{K0}$ = binary number Extension of the Destination Node IDentification.

13. (Previously Presented) The method according to claim 11, wherein the Source Node IDentification is calculated with the following algorithm:

$$IDSN_{K2+K0} = IDSN_{K2} + 16 * IDSNE_{K0}$$

Where: $IDSN_{K2+K0}$ = binary number Extended IDentification of the Source Node (calculated by using the bits of the second byte andthe third byte) $IDSN_{K2}$ = binary number IDentification of the Source Node; $IDSNE_{K0}$ = binary number Extension of the Source Node IDentification.

14. (Previously Presented) A computer program comprising means for implementing the algorithm set forth in claim 12 or 13.

15. (Previously Presented) A computer readable means having a computer program recorded thereon, said computer readable medium comprising means for implementing the algorithm indicated in claim 12.

16. (Currently Amended) A data transmission apparatus adapted to produce a transmission frame, said apparatus comprising:

a processor, and a memory including software instruction adapted to enable the apparatus to perform the step of:

producing a transmission frame with a first, second and third byte,

wherein ~~The use of~~ a third byte is used by the processor to~~of a telecommunication signal frame to~~ manage in an optimized manner, information contained in a first and a second byte of the frame, and

wherein said third byte comprises at least one Source Node IDentification Extension bit, at least one Destination Node IDentification Extension bit and at least one bit indicating a change of information in said at least one of said first, second and third byte.

17. (Currently Amended) A method of communicating using a transmission frame, comprising:

producing said transmission frame ~~so as~~ to comprise a section overhead with a Regeneration Section OverHead (RSOH) and a Multiplex Section OverHead (MSOH),

wherein said RSOH comprising a first byte and a second byte, said first byte comprises bits identifying the destination node and said second byte comprising bits identifying the source node, and wherein said MSOH comprises a third byte comprising at least one Source Node IDentification Extension bit, at least one Destination Node IDentification Extension bit and at least one bit indicating a change of the information in said at least one of said first, second and third byte.

18. (Previously Presented) The method of communicating using a transmission frame according to claim 17, wherein said Source Node IDentification Extension portion and said Destination Node IDentification Extension portion, each comprise two bits and said information change portion has four bits.

19. (Previously Presented) The method of communicating using a transmission frame according to claim 17, wherein both said Source Node IDentification Extension portion and said Destination Node IDentification Extension portion have three bits and said indicating an information change portion has two bits.

20. (Previously Presented) The method of communicating using a transmission frame according to claim 18, wherein said Source Node IDentification Extension portion has fifth and

sixth bits of the third byte, said Destination Node IDentification Extension portion has subsequent two bits and said information change portion has first four bits.

21. (Previously Presented) The method of communicating using a transmission frame according to claim 19, wherein said Source Node IDentification Extension portion has third, fourth and fifth bits of the third byte, said Destination Node IDentification Extension portion has subsequent three bits and said information change portion has first two bits.

22. (Previously Presented) The method of communicating using a transmission frame according to claim 17, wherein the third byte is located at 9^{th} row, 9^{th} column of first STM-1 of the frame.

23. (Previously Presented) The method of communicating using a transmission frame:

producing said transmission frame wherein use of a third byte of the frame to manage in an optimized manner information contained in a first and a second byte of the frame, wherein said third byte comprises at least one Source Node IDentification Extension bit, at least one Destination Node IDentification Extension bit and at least one bit indicating a change of information in said at least one of first, second and third byte.